

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-44. (Canceled)

45. (Currently Amended) A remote gateway agent installed in a wireless gateway in a wireless data network for enabling remote data access to and task execution on a processing system on a wired data network through a remote proxy agent comprising:

the ~~remote gateway agent residing on a gateway, wherein the wireless gateway~~ is accessible to a wireless network-capable user device via the wireless data network and accessible to a remote proxy agent via a~~the wired data~~ network, and wherein the remote gateway agent is adapted for:

receiving a request from the wireless network-capable user device for a task to be performed by the processing system; and

forwarding the task request to the remote proxy agent residing on the processing system, wherein the remote proxy agent is adapted for:

receiving and analyzing the task request from

the remote gateway agent;
directing the request to the processing system
for processing; and
sending a result from the processing system to
the remote gateway agent; and
wherein the remote gateway agent is further adapted ~~for~~
for:
receiving the result;
transcoding the result for viewing by the wireless
network-capable user device; and
sending the result to the wireless network-capable
user device via the wireless data network.

46. (Previously Presented) The remote gateway agent of claim 45
wherein the processing system is selected from the group
consisting of a personal computer, a multipurpose printing
center, and a computer-connected peripheral.

47. (Canceled)

48. (Previously Presented) The remote gateway agent of claim 45,
wherein the processing system comprises at least one
application selected from the group consisting of an e-mail
application, a word processing application, a facsimile
application, a telephony application, and an operating

system component application.

49. (Previously Presented) The remote gateway agent of claim 45, wherein the task request is selected from the group consisting of searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the processing system, and powering off the device connected to the processing system.

50. (Previously Presented) The remote gateway agent of claim 45, wherein the remote gateway agent is further adapted for:
 receiving a registration request from the remote proxy agent, wherein the remote proxy agent resides on the processing system; and
 registering the remote proxy agent with the remote gateway agent.

51. (Previously Presented) The remote gateway agent of claim 45, wherein the remote gateway agent is further adapted for:
 determining whether the user device is entitled to request the task from the processing system; and
 establishing a path to a remote proxy agent if the user device is entitle to request the task from the processing system.

52. (Previously Presented) The remote gateway of claim 45, wherein the remote proxy agent is further adapted for registering with the remote gateway agent.

53. (Canceled)

54. (Canceled)

55. (Currently Amended) The remote gateway agent of ~~claim 54~~ claim 45, wherein the wireless network-capable device is a WAP enabled cellular phone.

56. (Previously Presented) The remote gateway agent of claim 45, wherein the request specifies a serial execution of serial tasks and return of results.

57. (Previously Presented) The remote gateway agent of claim 45, wherein a plurality of requests are sent to the processing system in an un-interrupted data session.

58. (Currently Amended) A remote proxy agent residing in a processing system on a wired data network for enabling remote data access to a software application comprising:
a registration processor adapted for sending a registration request to a remote gateway agent residing on a

wireless gateway on a wireless data network, wherein the gateway is accessible to a wireless network-capable user device via a~~the wireless data network~~;

a request analyzer adapted for receiving, parsing and verifying a task request forwarded by the remote proxy agent from the user device;

a request processor adapted for processing the task request for task-performance instructions;

an application program interface adapted for sending the task-performance instruction to the software application;
and

a results processor adapted for sending a result from the software application to the remote ~~proxy-gateway~~ agent for forwarding to the user device via the wireless data network, the remote gateway agent being adapted for:

receiving the result; and

transcoding the result for viewing by the user device.

59. (Previously Presented) The remote proxy agent of claim 58, wherein the processing system is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.

60. (Canceled)

61. (Previously Presented) The remote proxy agent of claim 58, wherein the task request is selected from the group consisting of search a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the processing system, and powering off the device connected to the processing system.
62. (Previously Presented) The remote proxy agent of claim 58, wherein the software application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.
63. (Previously Presented) The software application of claim 58, wherein the request analyzer, the request processor and the results processor utilize resident processing capability of the host device.
64. (Currently Amended) A method for enabling remote data access to and task execution on a processing system on a wired network through remote ~~agents~~, agents, comprising:
 receiving at a remote gateway agent a registration request from a remote proxy agent ~~at a remote gateway agent~~,

wherein the remote proxy agent resides on the processing system and wherein the remote gateway agent resides on a wireless gateway connecting a wireless network with the wired network;

registering the remote proxy agent with the remote gateway agent;

receiving a request for access to the processing system from a wireless network-capable user device;

determining whether the user device is entitled to access the processing system; and

forwarding the request for access to the processing system if the user device is entitled to access the processing system; and

receiving and analyzing the request from the remote gateway agent at the remote proxy agent;

directing the request to the processing system for processing; and

sending a result from the processing system to the user device via the ~~network~~ wired network;

receiving the result at the remote gateway agent;

transcoding the result for viewing by the user device;

and

sending the result to the user device via the wireless data network.

65. (Currently Amended) The method of claim 64, wherein the user device ~~is a wireless,~~ comprises a WAP enabled phone and the wired network ~~is comprises~~ the Internet ~~network~~.
66. (Canceled)
67. (Previously Presented) The method of claim 64, wherein directing the request to the processing system for processing comprises directing the request to the processing system for processing via an application program interface between the remote gateway agent and an application specified in the request.
68. (Previously Presented) The method of claim 64, wherein the processing is performed by an operating system component of the processing system.
69. (Currently Amended) The method of claim 64, wherein in the steps are conducted repeatedly in the course of a single data session between the user device and the data system.
70. (Currently Amended) A remote gateway agent interfaced to a wired data network for enabling remote data access to a processing system on the wired data network, comprising:
the remote gateway agent being installed in a wireless

gateway in a wireless data network and being adapted for:

receiving a registration request from a remote proxy agent, wherein the remote proxy agent resides on the processing system;

registering the remote proxy agent with the remote gateway agent;

receiving a request for access to the processing system from a wireless network-capable user device via the wireless data network;

determining whether the user device is entitled to access the processing system; and

forwarding the request for access to the processing system for processing if the user device is entitled to access the processing system;

receiving a result from the processing system;
transcoding the result for viewing by the user device; and

forwarding the result to the user device via the network.

71. (Previously Presented) The remote gateway agent of claim 70, wherein the processing system is a personal computer.

72. (Previously Presented) The remote gateway agent of claim 70, wherein the processing system is a multi-purpose printing

center.

73. (Previously Presented) The remote gateway agent of claim 70, wherein the processing system is a computer-connected peripheral.

74. (Previously Presented) The remote gateway agent of claim 70, wherein the request is selected from the group consisting of searching a directory, opening a target file, sending an e-mail, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the processing system, powering off the device connected to the processing system.

75. (Canceled)

76. (Canceled)

77. (Canceled)

78. (Currently Amended) The remote gateway agent of ~~claim 77~~ claim 70, wherein the wireless network-capable user device is a WAP enabled cellular phone.

79. (Previously Presented) The remote gateway agent of claim 70, wherein a request specifies a serial execution of serial tasks and return of results.

80. (Previously Presented) The remote gateway agent of claim 70, wherein many requests are sent to the processing system in an un-interrupted data session.